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(54) Title: METAL WIRE COATED WITH A LAYER OF METAL MATERIAL INTENDED TO REINFORCE ELASTOMERIC MATERIALS AND METHODS FOR PRODUCING THE SAME

Descaling Dry drawing Surface treatment Drying Dry drawing Patenting Deposition Wet drawing

(57) Abstract: A method for producing a metal wire for reinforcing an elastomeric material as well as a metal wire and a metal cord for reinforcing such an elastomeric material are described. The metal wire comprises a metal core having a predetermined initial diameter and a metal coating layer. The method comprises the steps of: a) submitting the core to at least one surface treatment for predisposing the surface of the core to being coated with the coating layer; b) thermally treating the core; c) depositing the metal coating layer to a predetermined initial thickness on the core by means of a plasma deposition technique; and d) drawing the coated core until the core has a final diameter smaller than said predetermined initial diameter and the metal coating layer has a final thickness smaller than said predetermined initial thickness. Advantageously, it is possible to obtain a wire coated in a uniform and homogeneous manner, including a core having a smooth surface suitable for the deposition of the coating layer and a structure suitable for the cold deformation involved in the drawing step.